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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,195	06/05/2001	Ward S. Foster	10005666-1	5699

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HEWLETT-PACKARD COMPANY  
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EXAMINER

DINH, MINH

ART UNIT PAPER NUMBER

2132

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/873,195

Applicant(s)

FOSTER ET AL.

Examiner

Minh Dinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 June 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to the amendment filed 05/02/2005. Claims 1, 10, 17 and 21 have been amended; claim 23 has been added. The specification has also been amended.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1 and 23 have been considered but are not persuasive. Applicant's amendments have necessitated a new search and new grounds of rejection.

3. Applicant's arguments filed 05/02/2005 with respect to claims 10, 17 and 21 have been fully considered but they are not persuasive. Applicants argue that the "JDF Specification Draft Spiral 4.0" does not teach the amended features. "JDF Specification" discloses storing the job ticket (either original or a copy), generating a reference of the stored job ticket (i.e., the location where the job ticket is stored) and providing the reference to a device which later uses the reference to retrieve the stored job ticket (Section 2.4 Role of Messaging in JDF; Section 5.6.2.8 SubmitQueueEntry, p. 157).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by the reference "JDF Specification Draft Spiral 4.0". The reference has a copyright date of 2000 and the publication date of the reference has not been determined; however, the applicant has admitted that the reference is prior art (Specification, pages 27-30). Therefore, the "JDF Specification Draft Spiral 4.0" reference (hereinafter "JDF Specification") is treated as admitted prior art under 102(b).

Regarding claim 10, "JDF Specification" discloses a method comprising: identifying a branch of the job ticket; receiving a branch access request from a processor, the branch access request comprising the location of the job ticket, which meets the limitation of a job ticket reference; retrieving the stored job ticket using the job ticket reference provided by the processor; providing the processor with access to the branch; and locking the branch (Sections 4.4 Spawning and Merging, p. 92; 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96; Section 2.4 Role of Messaging in JDF; Section 5.6.2.8 SubmitQueueEntry, p. 157).

Regarding claim 11, "JDF Specification" further discloses a lock flag, wherein the lock flag is set to lock the branch (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96; table 3.9, p. 49).

Regarding claim 12, "JDF Specification" further discloses a data table listing branches of the workflow and wherein when the processor accesses a branch, the job

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ticket service marks the data table to indicate the branch is unavailable for modification (table 4.1, p. 86).

Regarding claim 13, "JDF Specification" further discloses that the lock flag locks the branch to prevent branch modification, and wherein a second processor may access the locked branch in a read-only mode (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 7-9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over "JDF Specification Draft Spiral 4.0" in view of Bacon et al (6,697,784).

Regarding claims 1 and 23, "JDF Specification" discloses an apparatus comprising: a work flow controller coupled to a communications network wherein the work flow controller is capable of defining a work flow corresponding to a job request, and capable of defining the job ticket related to the job request, and wherein the work flow comprises one or more branches (Sections 2.1.2.3 Agents, 2.1.2.4 Controllers, p. 29; fig. 2.1, p. 30; Sections 2.2 JDF Workflow, 2.2.1 Job Structure, p. 31-33); and a job

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ticket service that is capable of storing the job ticket, generating a stored location of the job ticket, which meets the limitation of a job ticket reference, and providing the job ticket reference to a processor, wherein the job ticket comprises a framework specifying the one or more branches, and wherein the job ticket service locks a branch when the branch is accessed by a processor (table 3.9, p. 49; Sections 4.2.1 Determining Executable Nodes, p. 84; 4.4 Spawning and Merging, p. 92; 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96; Section 2.4 Role of Messaging in JDF; Section 5.6.2.8 SubmitQueueEntry, p. 157).

“JDF Specification” does not teach sharing of the job ticket, but instead provides multiple devices each with a copy of the job ticket to permit parallel processing. Bacon discloses a method and system for managing workflow in which only one instance of a process definition, which meets the limitation of a job ticket, is shared among multiple devices instead of providing a copy of the process definition to each of the multiple devices (col. 4, lines 27-43; col. 6, lines 8-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the “JDF Specification” apparatus such that a single copy of the job ticket is shared among multiple devices instead of generating a copy for each of the devices, as taught by Bacon. The motivation for doing so would have been to reduce processing load, to serve more workflows concurrently and to reduce storage requirement. Accordingly, the multiple devices use the job ticket reference to access the job ticket concurrently.

Regarding claim 2, "JDF Specification" further discloses a lock flag, wherein the lock flag is set to lock the branch (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96; table 3.9, p. 49).

Regarding claim 3, "JDF Specification" further discloses that the lock flag locks the branch to prevent branch modification, and wherein a second processor may access the locked branch in a read-only mode (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96).

Regarding claim 7, "JDF Specification" further discloses a job store storing content corresponding to the branch, wherein the processor accesses the content when the branch is unlocked (Section 4.1 Creation and Modification, p. 79).

Regarding claim 8, "JDF Specification" further discloses a lock flag providing the lock status for the branch (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96; table 3.9, p. 49).

Regarding claim 9, "JDF Specification" further discloses a data table listing branches of the workflow and wherein when the processor accesses a branch, the job ticket service marks the data table to indicate the branch is unavailable for modification (table 4.1, p. 86).

8. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over "JDF Specification" in view of Bacon as applied to claim 1, and further in view of Silberschatz et al ("Operating System Concepts"). "JDF Specification" does not disclose the use of an access key and that the key is encrypted. Silberschatz discloses the use of an

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access key (Sections 6.7, p. 197; 13.4.4 A Lock-Key Mechanism, p. 445). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus disclosed in the "JDF Specification" reference to use an access key, as taught by Silberschatz. The motivation for doing so would have been that the access key could be passed freely from domain to domain (Section 13.4.5 Comparison, p. 445). Silberschatz also discloses that sensitive information is encrypted when transmitted over the network (Section 14.6 Encryption, p. 471). Since the access key is sensitive information and transmitted across domains, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus disclosed in the "JDF Specification" reference encrypt the access key, as taught by Silberschatz. The motivation for doing so would have been to protect information transmitted over unreliable link.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over "JDF Specification" in view of Bacon as applied to claim 1 above, and further in view of McNally et al (6,823,513). "JDF Specification" does not disclose that the processor that accesses the branch is authorized to access the branch, and wherein such authorization is stored with the job ticket. McNally discloses a workflow distribution process that grants authorization to an entity so that the entity is authorized to access a branch, and wherein such authorization is stored with the job ticket (col. 5, lines 43-61; col. 6, lines 27-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus disclosed in the "JDF



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Specification” such that the processor must be authorized to access the branch and that such authorization is stored with the job ticket, as taught by McNally. The motivation for doing so would have been to minimize the risk of loss of resources that are proprietary to the provider of the resource (col. 2, lines 54-61).

10. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over “JDF Specification” as applied to claim 10 above, and further in view of Silberschatz et al (“Operating System Concepts”). “JDF Specification” does not disclose the use of an access key and that the key is encrypted. Silberschatz discloses the use of an access key (Sections 6.7, p. 197; 13.4.4 A Lock-Key Mechanism, p. 445). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus disclosed in the “JDF Specification” reference to use an access key, as taught by Silberschatz. The motivation for doing so would have been that the access key could be passed freely from domain to domain (Section 13.4.5 Comparison, p. 445). Silberschatz also discloses that sensitive information is encrypted when transmitted over the network (Section 14.6 Encryption, p. 471). Since the access key is sensitive information and transmitted across domains, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus disclosed in the “JDF Specification” reference encrypt the access key, as taught by Silberschatz. The motivation for doing so would have been to protect information transmitted over unreliable link.

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11. Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over "JDF Specification" over Barkley (6,088,679).

Regarding claims 17 and 21, "JDF Specification" discloses a method comprising: defining one or more tasks to complete a job ticket, wherein the job ticket comprises a node-tree having a plurality of branches, and wherein each branch of the plurality of branches includes one or more defined tasks (Sections 2.1.2.3 Agents, 2.1.2.4 Controllers, p. 29; fig. 2.1, p. 30; Sections 2.2 JDF Workflow, 2.2.1 Job Structure, p. 31-33); receiving a request from a device to access one or more of the plurality of branches, each said request comprising a location where the job ticket is stored, the location meets the limitation of a job ticket reference; retrieving the stored job ticket using the job ticket reference provided by the device; determining if another device is currently accessing one or more of the plurality of branches (Sections 4.2.3 Device / Controller Selection, p. 85); for branches not being accessed, copying information from the branches to the device; and locking the branch access (Sections 4.4 Spawning and Merging, p. 92; 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96).

"JDF Specification" does not disclose implementing authorization for access control in the workflow processing system. Barkley discloses implementing authorization for access control in a workflow processing system (col. 2, lines 9-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed in the "JDF Specification" to implement authorization for access control, as taught by Barkley. Access control is an integral part in the enactment of a workflow.

Regarding claims 18 and 22, "JDF Specification" further discloses unlocking the branch; and copying the modified branch information to the job ticket (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96).

Regarding claim 19, "JDF Specification" further discloses that locking the branch comprising setting a lock flag at the branch (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96).

Regarding claim 20, "JDF Specification" further discloses that locking the branch prevents branch information modification and allows read-only access to the locked branch. (Section 4.4.2 Case 2: Spawning and Merging with resource copying, p. 95-96).

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,639,687 to Neilsen

U.S. Patent Application Publication No. 2002/0080400 to Hube et al.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Gilberto 3." followed by a stylized flourish.

GILBERTO BARRÓN JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100